

Title (en)

Closed loop drive circuit with external brake assist

Title (de)

Antriebsschaltung mit geschlossener Schleife und externer Bremshilfe

Title (fr)

Circuit de commande à boucle fermée avec freinage assisté externe

Publication

EP 2466018 B1 20191113 (EN)

Application

EP 10195815 A 20101217

Priority

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Abstract (en)

[origin: EP2466018A1] The present disclosure refers to a hydrostatic drive for a vehicle (10), which may comprises an open circuit (100), a closed travel circuit (120), and an electronic controller (320). A main variable displacement hydraulic pump (102) may be configured to be driven by an internal combustion engine (12) equipped with a speed sensor (350). The main variable displacement hydraulic pump (102) may be configured to supply hydraulic fluid to at least one hydraulic consumer (34,44,50) via a hydraulic supply line (106). A pressure relief valve (118) may be connected to a reservoir (300) and may be permanently connected to the hydraulic supply line (106) such that hydraulic fluid in the hydraulic supply line (106) is discharged into the reservoir if a preset pressure level is reached in the open circuit. The electronic controller (320) may be configured to run a strong braking mode in which the electronic controller (320) at least partially increases the displacement of the main variable displacement hydraulic pump (102) such that hydraulic fluid is discharged via the permanently connected pressure relief valve (118) into the reservoir (300) if an engine speed is determined, based on a signal received from a speed sensor (350), which is higher than a predetermined maximum engine speed.

IPC 8 full level

B60T 10/04 (2006.01); **B60T 17/02** (2006.01); **E02F 9/22** (2006.01); **F04B 17/05** (2006.01); **F15B 11/17** (2006.01); **F16H 61/4017** (2010.01); **F16H 61/4148** (2010.01); **F16H 61/4157** (2010.01)

CPC (source: EP US)

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Citation (examination)

US 6202783 B1 20010320 - TAYLOR LLOYD [DE], et al

Cited by

EP2878505A1; CN113062399A; CN103711172A; JP2015052277A; CN114867923A; ITMI20132013A1; EP2784223A3; EP2949530A4; US11391300B2; US9885168B2; WO2021127634A1; EP4077818A1

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